Modi, Beena J <beena.j.modi@wv.gov>

(no subject)

8 messages

Modi, Beena J <beena.j.modi@wv.gov>
To: Daniel P Roberts <daniel.p.roberts@wv.gov>

7.1.4. Requirements for Use of Catalytic Reduction Devices:

a. Rich-burn engine(s) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controlle listed in the General Permit Registration for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering val than or equal to 2%.

b. For engine(s) equipped with a catalyst, the registrant shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high t catalyst occurs. If the engine shuts off due to high temperature, the registrant shall also check for thermal deactivation of the catalyst before normal operations are resumed.

c. The registrant shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements.

[45CSR13, General Permit Registration G60-C041 and G60-D, 5.1.5.a, 5.1.5.d, and 5.1.5.e]

Hi Dan,
Can you read below emails and let me know your answer?

Thanks,

Beena

Gates, Andy (BHE GT&S)
to me

Beena,

We have reviewed this and believe that draft condition 7.1.4.b. is not an applicable requirement. This provision did not appear in the General Permit G60-C under which this emergency gener this is a certified emergency generator engine. Compliance is maintained by maintaining the engine in accordance with its certification and by complying with the monitoring requirements for t

Please delete draft condition 7.1.4.b.

I believe those are all of the comments we have right now.

Thank you

McCumbers, Carrie
to me

Beena,

Although the engine was registered under G60-C, they are now subject to G60-D. You could ask Dan Roberts if the engines would be subject to G60-D, condition 5.1.5.d if they have a cataly as, if the engines are certified, are they still subject to the catalyst requirements in the general permit if they are not required by the regulation to install a catalyst to demonstrate compliance.

Thanks,
Carrie

DP permit 2021.docx
300K

Modi, Beena J <beena.j.modi@wv.gov>
To: Daniel P Roberts <daniel.p.roberts@wv.gov>

---------- Forwarded message ---------
From: **Modi, Beena J** <beena.j.modi@wv.gov>
Date: Thu, Sep 9, 2021 at 12:23 PM
Subject:
To: Daniel P Roberts <daniel.p.roberts@wv.gov>

7.1.4. Requirements for Use of Catalytic Reduction Devices:

a. Rich-burn engine(s) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller listed in the General Permit Registration for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valv than or equal to 2%.

b. For engine(s) equipped with a catalyst, the registrant shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high te catalyst occurs. If the engine shuts off due to high temperature, the registrant shall also check for thermal deactivation of the catalyst before normal operations are resumed.

c. The registrant shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements.
[45CSR13, General Permit Registration G60-C041 and G60-D, 5.1.5.a, 5.1.5.d, and 5.1.5.e]

Hi Dan,
Can you look at below emails and let me know your answer?

Thanks,

Beena

Gates, Andy (BHE GT&S)
to me
[Quoted text hidden]

DP permit 2021.docx
300K

Roberts, Daniel P <daniel.p.roberts@wv.gov> Mon, Sep 13, 2021 at 9:41 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Beena,

Hey. I received your email. I was on vacation on Friday. I don't have an answer for your question right off the top of my head and will have to do some research.I will get back to you as soon as I can.

Dan
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 14, 2021 at 10:16 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

Carrie,
I want to talk to you about this. When can I call you?
[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Tue, Sep 14, 2021 at 10:22 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

You can call me now.

[Quoted text hidden]

Roberts, Daniel P <daniel.p.roberts@wv.gov> Tue, Sep 14, 2021 at 4:42 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Beena,

Hey. I have done extensive research, but still don't feel like I have a definitive answer for you. It appears that the language from permit condition 7.1.4.b. was updated from the G10-C to the G10-D (issued May 9, 2018) and would apply, but I cannot find where it originated from. I reviewed 40 CFR 60 Subparts JJJJ and IIII and 40 CFR63 Subpart ZZZZ and did general searches too. Emergency generators EG01 and EG02 were manufactured in 2012 and list NSCR as their control device. Therefore, it appears that the requirement to monitor the temperature to the inlet of the catalyst to prevent thermal deactivation is appropriate. And I believe they would be subject to the catalyst requirements even if they are a certified engine.

I hope this helps. Respond or call if you want to discuss this further,

Dan
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 14, 2021 at 8:31 PM
To: "Roberts, Daniel P" <daniel.p.roberts@wv.gov>

Thank you for the information, Dan!
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 14, 2021 at 8:32 PM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

---------- Forwarded message ---------
From: **Roberts, Daniel P** <daniel.p.roberts@wv.gov>
Date: Tue, Sep 14, 2021, 4:43 PM
Subject: Re:
To: Modi, Beena J <beena.j.modi@wv.gov>

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov>

R30-03300014-2021-Law Compressor Station

6 messages

Modi, Beena J <beena.j.modi@wv.gov>
To: Jerry Williams <jerry.williams@wv.gov>

Hi Jerry, Can you read below emails and let me know your answer?

Thanks,

Beena

Gates, Andy (BHE GT&S)
to me

Beena,

We have reviewed this and believe that draft condition 7.1.4.b. is not an applicable requirement. This provision did not appear in the General Permit G60-C under which this emergency gener this is a certified emergency generator engine. Compliance is maintained by maintaining the engine in accordance with its certification and by complying with the monitoring requirements for t

Please delete draft condition 7.1.4.b.

I believe those are all of the comments we have right now.

Thank you

McCumbers, Carrie
to me

Beena,

Although the engine was registered under G60-C, they are now subject to G60-D. You could ask Jerry Williams if the engines would be subject to G60-D, condition 5.1.5.d if they have a cata as, if the engines are certified, are they still subject to the catalyst requirements in the general permit if they are not required by the regulation to install a catalyst to demonstrate compliance.

Thanks,
Carrie

Williams, Jerry <jerry.williams@wv.gov> Thu, Sep 9, 2021 at 8:50 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Please send me the permit condition you want me to look at. Thanks
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Thu, Sep 9, 2021 at 8:58 AM
To: "Williams, Jerry" <jerry.williams@wv.gov>

7.1.4. Requirements for Use of Catalytic Reduction Devices:

a. Rich-burn engine(s) equipped with non-selective catalytic reduction (NSCR) air pollution control devices shall be fitted with a closed-loop, automatic air/fuel ratio controller to ensure emissions of regulated pollutants do not exceed the emission limit listed in the General Permit Registration for any engine/NSCR combination under varying load. The closed-loop, automatic air/fuel ratio controller shall control a fuel metering valve to ensure a fuel-rich mixture and a resultant exhaust oxygen content of less than or equal to 2%.

b. For engine(s) equipped with a catalyst, the registrant shall monitor the temperature to the inlet of the catalyst and in accordance with manufacturer's specifications; a high temperature alarm shall shut off the engine before thermal deactivation of the catalyst occurs. If the engine shuts off due to high temperature, the registrant shall also check for thermal deactivation of the catalyst before normal operations are resumed.

c. The registrant shall follow a written operation and maintenance plan that provides the periodic and annual maintenance requirements.
[45CSR13, General Permit Registration G60-C041 and G60-D, 5.1.5.a, 5.1.5.d, and 5.1.5.e]

[Quoted text hidden]

DP permit 2021.docx
300K

Williams, Jerry <jerry.williams@wv.gov> Thu, Sep 9, 2021 at 9:36 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

I looked at the evaluation and registration for G60-C041 to see if the units had catalysts. Neither document indicated. I did not review this application, Dan Roberts did. You will need to either look at the application on AX or contact Dan. But, if the units are equipped with a catalyst, they would be subject to that requirement.
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Thu, Sep 9, 2021 at 9:49 AM
To: "Williams, Jerry" <jerry.williams@wv.gov>

Ok, will do! Thank you, Jerry!
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 14, 2021 at 10:13 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov>

Law compressor station

11 messages

Modi, Beena J <beena.j.modi@wv.gov> Fri, Oct 1, 2021 at 12:20 PM
To: "Gates, Andy (BHE GT&S)" <andy.gates@bhegts.com>

Hi Andy,
I have updated the permit and factsheet as you requested. Please let me know your comments by October 6th. I am planning to send it to notice soon.

Thank you for your time,

Beena modi

2 attachments

DP permit 2021 updated Beena.docx
300K

DP factsheet 2021 updated Beena.doc
109K

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Fri, Oct 1, 2021 at 12:51 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Thank you, Beena – I'll review and let you know if I see anything else.

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

From: Modi, Beena J <beena.j.modi@wv.gov>
Sent: Friday, October 1, 2021 12:20 PM

To: Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com>
Subject: [EXTERNAL] Law compressor station

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Oct 5, 2021 at 11:38 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Wed, Oct 6, 2021 at 9:10 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Hello Beena –

Thank you for making the changes we requested!

As you requested, I'm providing comments today. I have two more requests:

1. Please delete the references to CPR02. That backup air compressor no longer exists at the facility. I've given some suggestions for removal in the attachment.
2. Would you please consider adding NSPS OOOOa to the permit shield? This facility is currently not subject to those rules. We had put the following information in the application:

> 40 CFR 60, Subpart OOOOa –This facility has no equipment with applicable requirements under Subpart OOOOa. This subpart applies to equipment installed after September 18, 2015. The facility has no affected emissions units that have been installed after the applicable Subpart OOOOa effective date.

Let me know if you have any questions or we need to discuss. Thank you for the opportunity to provide these comments,

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

From: Modi, Beena J <beena.j.modi@wv.gov>
Sent: Friday, October 1, 2021 12:20 PM
To: Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com>
Subject: [EXTERNAL] Law compressor station

THIS MESSAGE IS FROM AN EXTERNAL SENDER.
Look closely at the **SENDER** address. Do not open **ATTACHMENTS** unless expected. Check for **INDICATORS** of phishing. Hover over **LINKS** before clicking. Learn to spot a phishing message

Hi Andy,

[Quoted text hidden]

DP permit 2021 updated Beena - EGTS markup.docx
302K

Modi, Beena J <beena.j.modi@wv.gov> Wed, Oct 6, 2021 at 9:12 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

---------- Forwarded message ---------
From: **Gates, Andy (BHE GT&S)** <Andy.Gates@bhegts.com>
Date: Wed, Oct 6, 2021 at 9:10 AM
Subject: RE: [EXTERNAL] Law compressor station
To: Modi, Beena J <beena.j.modi@wv.gov>

[Quoted text hidden]

DP permit 2021 updated Beena - EGTS markup.docx
302K

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Oct 6, 2021 at 10:22 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Beena,

I have attached my responses to his comments. I'm okay with these changes. I found some additional things that will need to be changed though. I'm also okay with adding OOOOa to the permit shield. You will need to update the fact sheet to describe the changes you made regarding CPR01 and will need to add OOOOa to the non-applicability determination section. After you make the changes, please send me the revised permit and fact sheet.

Thanks,
Carrie
[Quoted text hidden]

DP permit 2021 updated Beena - EGTS markup Carrie's comments.docx
306K

Modi, Beena J <beena.j.modi@wv.gov> Wed, Oct 6, 2021 at 10:23 AM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Ok, thanks Carrie!
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Oct 6, 2021 at 1:10 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Please review.
Thanks!
[Quoted text hidden]

2 attachments

DPFactsheet R30-03300014-2021.doc
108K

DPPermit R30-03300014-2021.docx
301K

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Oct 6, 2021 at 1:41 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

I have a very minor comment on the fact sheet which is attached. On the permit, I don't really have any comments, but the version you sent me has tracked changes. You need to remove these tracked changes from the permit.
[Quoted text hidden]

DPFactsheet R30-03300014-2021 Carrie's comments part 3.doc
109K

Modi, Beena J <beena.j.modi@wv.gov> Wed, Oct 6, 2021 at 2:15 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Thank you, Carrie! I fixed it and will send it to Stephanie.
[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Oct 6, 2021 at 2:22 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Ok, thanks!
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov>

EGTS - Law and Deep Valley Stations - emergency generators

6 messages

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Tue, Sep 28, 2021 at 4:14 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>
Cc: "Modi, Beena J" <beena.j.modi@wv.gov>, "Gangle, Richard (BHE GT&S)" <Richard.Gangle@bhegts.com>, "Hall, Stephen (BHE GT&S)" <Stephen.Hall@bhegts.com>

Please see the attached letter regarding the applicability of updated general permits.

We are happy to discuss this further with you.

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

EGTS Deep Valley and Law Stations - emergency generator G60-D comments 09-28-2021.pdf
151K

McCumbers, Carrie <carrie.mccumbers@wv.gov> Tue, Sep 28, 2021 at 4:34 PM
To: Beverly D McKeone <beverly.d.mckeone@wv.gov>, Jerry Williams <jerry.williams@wv.gov>
Cc: "Modi, Beena J" <beena.j.modi@wv.gov>

See the attached letter. Do you want me to set up an internal DAQ call to discuss this issue? This is the first time this issue regarding incorporating a G60-C registration with a current G60-D General Permit has came up. We have been doing this for other facilities and have never received this comment or push back.

Thanks,
Carrie
[Quoted text hidden]

EGTS Deep Valley and Law Stations - emergency generator G60-D comments 09-28-2021.pdf

151K

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 28, 2021 at 4:48 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

I did ! Yes!
[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Sep 29, 2021 at 7:15 AM
To: "Williams, Jerry" <jerry.williams@wv.gov>, "Modi, Beena J" <beena.j.modi@wv.gov>
Cc: "McKeone, Beverly D" <beverly.d.mckeone@wv.gov>

So we have been incorporating the general permit incorrectly in our Title V permits? We need to go back and put in the G60-C requirements for Law and then reopen Deep Valley and change the requirements back to G60-C? What about all the other G60-C registrations we have been incorporating with the current G60-D permit? What about page 2 of G60-D which says it supersedes and replaces G60-C? Sorry, for all the questions, but this affects more than these two facilities. This is the first time it has come up, but that is probably because the engines at this site have catalysts and their concern is with that one requirement for catalysts that they can't meet.

On Wed, Sep 29, 2021 at 6:56 AM Williams, Jerry <jerry.williams@wv.gov> wrote:
> Thanks. The result is the same. From the G60-D fact sheet:
>
> There will be no future registrations, modifications, or administrative updates allowed to registrations issued under previous versions in the G60 series. If a registrant wishes to modify an existing registration under General Permit G60, it must be done so under General Permit G60-D.
>
> On Wed, Sep 29, 2021 at 6:46 AM Williams, Jerry <jerry.williams@wv.gov> wrote:
> > The company did not register under the G70-D. Therefore, they would not be subject to the requirements of that permit. If they make a change to their G70 series now, it would have to be the G70-D, otherwise, they continue to operate under the permit they are registered under. From the G70-D Fact Sheet:
> >
> > Currently, General Permits G70-A, G70-B and G70-C pertain to oil and natural gas production facilities designed and operated for the purpose of oil and natural gas production located at the well site. These general permits will continue to exist, however, there will be no future registrations, modifications, or administrative updates allowed to registrations issued under this permit. If a registrant wishes to modify an existing registration under one of these general permits, it must be done so under General Permit G70-D.
> >
> > On Wed, Sep 29, 2021 at 6:37 AM McKeone, Beverly D <beverly.d.mckeone@wv.gov> wrote:
> > > Upon further review of the G60 D documents and language on the general permit webpage - I feel that the company is correct. No where on the webpage do we state that folks under the G60-C are now covered under the D. We have added this language for other permits. Also, there is no mention of such a replacement in the G60_d fact sheet.
> > >
> > > So my call is that sources holding a G60-C continue to hold that general permit until such time as they make a change that requires permitting.
> > >
> > > Any objections?
> > >
> > > Bev
> > >
> > > On Tue, Sep 28, 2021 at 4:34 PM McCumbers, Carrie <carrie.mccumbers@wv.gov> wrote:
> > > [Quoted text hidden]

McKeone, Beverly D <beverly.d.mckeone@wv.gov> Wed, Sep 29, 2021 at 7:32 AM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>
Cc: "Williams, Jerry" <jerry.williams@wv.gov>, "Modi, Beena J" <beena.j.modi@wv.gov>, Bev McKeone <beverly.d.mckeone@wv.gov>

Sorry - but that is what it means. If they hold a G60-C those conditions should be in their Title V - not G60-D.

Bev
[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Sep 29, 2021 at 8:05 AM
To: "McKeone, Beverly D" <beverly.d.mckeone@wv.gov>
Cc: "Williams, Jerry" <jerry.williams@wv.gov>, "Modi, Beena J" <beena.j.modi@wv.gov>

I talked to Beena and she is making the changes to Law and we are going to reopen Deep Valley to include G60-C instead of G60-D. For all the other Title V permits, we will make the changes as the permits are renewed. I plan to have a meeting this week to let the Title V Group know of this change.

Carrie
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov>

R30-03300014-2021-Law Compressor Station

10 messages

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 14, 2021 at 3:26 PM
To: "Gates, Andy (BHE GT&S)" <andy.gates@bhegts.com>

Hi Andy,
Regarding comment #4:
Although the engine was registered under G60-C, they are now subject to G60-D. If the units are equipped with a catalyst, they would be subject to that requirement. Please let me know if you want to make a conference call with me and my manager, Carrie McCumbers.

Thanks,
Beena

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Tue, Sep 14, 2021 at 4:14 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Hello Beena –

I'm sorry I missed your call. Are you available Wednesday morning to discuss? I should be free most of the morning. We're still coming to the office every day; I should be available after 8:30.

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

From: Modi, Beena J <beena.j.modi@wv.gov>
Sent: Tuesday, September 14, 2021 3:26 PM
To: Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com>
Subject: [EXTERNAL] R30-03300014-2021-Law Compressor Station

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 15, 2021 at 7:26 AM
To: "Gates, Andy (BHE GT&S)" <andy.gates@bhegts.com>

Hi Andy,
Carrie sent you a request for a conference call this morning.

Thanks,
Beena
[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Wed, Sep 15, 2021 at 8:23 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

I got the invitation and will talk to you then – thanks!

[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Fri, Sep 17, 2021 at 1:51 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Hello Beena,

We will not be able to respond today and, as discussed on Wednesday, we are asking for more time to respond. We will provide additional input by Thursday, Sept. 23.

Thank you,

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Fri, Sep 17, 2021 at 1:54 PM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 28, 2021 at 9:44 AM
To: "Gates, Andy (BHE GT&S)" <Andy.Gates@bhegts.com>

Hi Andy,
Any updates regarding comment # 4?

[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Tue, Sep 28, 2021 at 10:39 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Hi Beena,

I apologize for the delay in providing a response. We are still developing it and will provide it as soon as possible; it's going through my management's review now.

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 28, 2021 at 10:59 AM
To: "Gates, Andy (BHE GT&S)" <Andy.Gates@bhegts.com>

Thank you for the update.
[Quoted text hidden]

---

5 attachments

image001.jpg 4K

image001.jpg 4K

image001.jpg 4K

image001.jpg 4K

image001.jpg 4K

Modi, Beena J <beena.j.modi@wv.gov> Tue, Sep 28, 2021 at 12:28 PM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

FYI

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov>

R30-03300014-2021-Law Compressor Station

17 messages

Modi, Beena J <beena.j.modi@wv.gov> Tue, Aug 17, 2021 at 5:58 PM
To: andy.gates@dominionenergy.com

Hi Andy,
Please review the attached files and let me know your comments by 8/20.

Thank you,

Beena Modi

2 attachments

DP factsheet 2021.doc
109K

DP permit 2021.docx
301K

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Fri, Aug 20, 2021 at 2:44 PM
To: "Modi, Beena J" <Beena.J.Modi@wv.gov>

Hello Beena –

Thank you for giving us the opportunity to review this!

I have a few comments and requests:

1. The old emergency air compressor (CPR02) has been permanently removed from the facility and replaced with an all-electric system. The unit wasn't included on Attachments D or E or the potential emissions calculations of the renewal application, but I did inadvertently leave the flow diagram for that unit in the package. All of the conditions specifically associated with that unit should be removed from the draft permit.
2. Please included NSPS Subpart OOOOa in the permit shield. There is a statement in the application that you can use for the shield.
3. Thank you for removing the SO2 and H2S limits and associated sampling that do not apply to this facility – I appreciate that.
4. Please delete condition 7.1.4.b. These are JJJJ-certified engines and compliance is maintained by operating them in accordance with condition 7.2.1.

Let me know if you have questions about these or would like to discuss. I'll be out of the office most of next week but should still be able to respond/discuss.

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

From: Modi, Beena J <beena.j.modi@wv.gov>
Sent: Tuesday, August 17, 2021 5:58 PM
To: Andy Gates (Gas Transmission - 2) <andy.gates@dominionenergy.com>
Subject: [EXTERNAL] R30-03300014-2021-Law Compressor Station

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Fri, Aug 20, 2021 at 2:50 PM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Mon, Aug 23, 2021 at 7:14 AM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

I'm okay with comments #1 and #2. Comment #3 doesn't require any additional changes to the permit. For comment #4, I'm not sure I understand his justification for removal. They have a catalyst and condition 7.1.4.b is for engines with a catalyst. I didn't see anything that says that it doesn't apply to certified engines. Do you understand why it can be removed?

For changes made for comments #1 and #4 (if you make this change), you will need to include the change in the Fact Sheet. For comment #3, you will need to add these two regulations to the non-applicable requirements section in the fact sheet. I would like to see the revised permit and fact sheet once you make the changes and resolve the question regarding comment #4.

Thanks,
Carrie
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Mon, Aug 23, 2021 at 7:19 AM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Thank you, Carrie! will do!
[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Mon, Aug 23, 2021 at 9:37 AM
To: "Modi, Beena J" <Beena.J.Modi@wv.gov>

Hello Beena –

I may have mis-spoken in my request #4 below – we are looking into this and I am trying to confirm that there is an automatic shut-off if the catalyst temperature gets too high on the emergency engines. I will follow up once I'm sure.

Andy Gates
Environmental Consultant
BHE GT&S, LLC

6603 West Broad Street
Richmond, Virginia 23230
804-389-1340

www.bhegts.com

andy.gates@bhegts.com

(Please note new email address)

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

From: Gates, Andy (BHE GT&S)
Sent: Friday, August 20, 2021 2:45 PM
To: Modi, Beena J <Beena.J.Modi@wv.gov>
Subject: RE: [EXTERNAL] R30-03300014-2021-Law Compressor Station

Hello Beena –

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Mon, Aug 23, 2021 at 9:45 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Mon, Aug 23, 2021 at 9:48 AM
To: andy.gates@dominionenergy.com

Thank you, Andy.
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 1, 2021 at 12:55 PM
To: andy.gates@dominionenergy.com

Hi Andy,
Is there any updates on request #4?

Thanks,

Beena
[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Wed, Sep 1, 2021 at 2:02 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Hello Beena -

We're still looking into this. I will get back to you soon.

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 1, 2021 at 2:03 PM
To: "Gates, Andy (BHE GT&S)" <Andy.Gates@bhegts.com>

Thank you
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Thu, Sep 2, 2021 at 9:37 AM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

Gates, Andy (BHE GT&S) <Andy.Gates@bhegts.com> Wed, Sep 8, 2021 at 2:54 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Beena,

We have reviewed this and believe that draft condition 7.1.4.b. is not an applicable requirement. This provision did not appear in the General Permit G60-C under which this emergency generator was originally permitted and installed. As I said in an earlier email, this is a certified emergency generator engine. Compliance is maintained by maintaining the engine in accordance with its certification and by complying with the monitoring requirements for the catalytic oxidation control device in draft condition 7.2.1.

Please delete draft condition 7.1.4.b.

I believe those are all of the comments we have right now.

Thank you,

[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 8, 2021 at 2:57 PM
To: "Gates, Andy (BHE GT&S)" <Andy.Gates@bhegts.com>

Thank you, Andy
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 8, 2021 at 2:57 PM
To: Carrie McCumbers <carrie.mccumbers@wv.gov>

[Quoted text hidden]

McCumbers, Carrie <carrie.mccumbers@wv.gov> Wed, Sep 8, 2021 at 4:07 PM
To: "Modi, Beena J" <beena.j.modi@wv.gov>

Beena,

Although the engine was registered under G60-C, they are now subject to G60-D. You could ask Jerry Williams if the engines would be subject to G60-D, condition 5.1.5.d if they have a catalyst, but the engines are certified under 40 CFR 60 Subpart JJJJ. Such as, if the engines are certified, are they still subject to the catalyst requirements in the general permit if they are not required by the regulation to install a catalyst to demonstrate compliance.

Thanks,
Carrie
[Quoted text hidden]

Modi, Beena J <beena.j.modi@wv.gov> Wed, Sep 8, 2021 at 4:09 PM
To: "McCumbers, Carrie" <carrie.mccumbers@wv.gov>

Ok, thank you, Carrie
[Quoted text hidden]

BHE GT&S
A BERKSHIRE HATHAWAY ENERGY COMPANY

BHE GT&S, LLC
6603 West Broad Street
Richmond, VA 23230

January 11, 2021

BY ELECTRONIC DELIVERY
DEPAirQualityPermitting@wv.gov

Laura M. Crowder
Director, Division of Air Quality
WVDEP
601 57th Street, SE
Charleston, WV 25304

RE: Eastern Gas Transmission and Storage, Inc. – Title V Renewal Application
Law Compressor Station – R30-03300014

Dear Ms. Crowder:

The renewal application for the Title V permit for Eastern Gas Transmission and Storage, Inc.'s[1] Law Compressor Station is attached. In accordance with WVDEP instructions on your website, only this electronic submittal will be made unless otherwise instructed.

If you need any additional information, please contact Andy Gates at (804) 389-1340 or andy.gates@dominionenergy.com[2].

Sincerely,

Richard B. Gangle
Director Environmental Services

Attachment: Law Station Title V Renewal Application Package

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[1] *As of November 1, 2020, Dominion Energy sold certain companies including Dominion Energy Transmission, Inc. to Berkshire Hathaway Energy Gas Transmission and Storage (BHE GT&S) Company. Dominion Energy Transmission, Inc. has changed its name to Eastern Gas Transmission and Storage, Inc.*

[2] *Please note that during a transition period, employees of the BHE GT&S unit will continue to utilize a Dominion Energy email address; however, BHE GT&S is not affiliated with Dominion Energy in any way. Any inferences with respect to the BHE GT&S use of a Dominion Energy email address should be disregarded, as the sender is no longer affiliated with Dominion Energy.*

LAW COMPRESSOR STATION
EASTERN GAS TRANSMISSION AND STORAGE, INC.
APPLICATION FOR TITLE V OPERATING PERMIT RENEWAL
TITLE V OPERATING PERMIT NO: R30-03300014

Eastern Gas Transmission and Storage, Inc.
Law Compressor Station
Route 90, P.O. Box 190
Mc Whorter, WV 26401

JANUARY 2021

EASTERN GAS TRANSMISSION AND STORAGE, INC.
LAW COMPRESSOR STATION

TITLE V PERMIT RENEWAL APPLICATION

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****Note:** There are no Attachments F or H for this permit application.

SECTION 1

Introduction

INTRODUCTION:

Law Station is a natural gas compressor station used to compress natural gas for Eastern Gas Transmission and Storage, Inc.'s transmission pipeline system in West Virginia. Law Station is in Good Hope, WV.

Law Station has the potential to emit in excess of 100 tons per year of nitrogen oxides (NOx) and 100 tons per year of volatile organic compounds (VOCs). The station is classified as a major stationary source under the West Virginia Department of Environmental Protection (WVDEP) Regulation (45 CSR Part 30) and is subject to the Title V Operating Permit provisions of Part 30. Law Station is also an area source of hazardous air pollutants (HAPs) since the potential to emit is less than 10 tons per year for individual HAPs and less than 25 tons per year of combined HAPs.

Law Station was originally issued a Title V Operating Permit (Permit No: R30-03300014-2006) in 2006 that has been subsequently renewed. Law Station is also subject to the underlying State Operating Permit (Rule 13 Permit No: R13-2963) and General Permit (Permit No: G60-C041). The Title V operating permit is for the operation of two (2) 660 hp natural gas fired reciprocating engines (EN01 and EN02), one (1) glycol dehydrator system (DEHY02) with flare (F1), one (1) dehydration unit reboiler (RBR02), two (2) 192.5 hp emergency generators (EG01 and EG02), and seven (7) above ground storage tanks of various sizes (TK01, TK02, and TK04 - TK08).

The last Title V renewal application was submitted in 2015, with the Title V Operating Permit Renewal being issued on July 12, 2016, with an expiration date of July 12, 2021.

PROCESS DESCRIPTION

Law Station is a compressor facility that services a natural gas pipeline system. The compressor engines (EN01 and EN02) at the facility receive natural gas flowing through a valve on the pipeline and recompresses that natural gas in order to further transport the natural gas through the pipeline system. Prior to exiting the facility through the pipeline, the compressed natural gas is processed by the dehydration unit (DEHY02). The dehydration unit removes moisture and impurities from the gas stream. Emergency backup power is supplied by emergency generators (EG01 and EG02).

The dehydration process begins with the compressed natural gas entering the unit and then being passed through a triethylene glycol dehydration system consisting of a contactor bed, a reboiler (RBR02), and associated equipment. As a result of this process, the natural gas is stripped of moisture and impurities, along with a small amount of hydrocarbons. The wet gas enters the contactor where moisture and some hydrocarbons are absorbed into the lean glycol. The glycol, which has become rich with absorbed moisture and hydrocarbons, is regenerated in the still column (DEHY02) using the heat generated from the natural gas-fired reboiler (RBR02) to liberate the moisture and hydrocarbon vapors. The regenerator vapors are vented to the flare (F1) to combust the hydrocarbons; thereby, reducing overall emissions and odor. The flare is permitted with a destruction efficiency of 95%. The compressed, dehydrated gas then enters the pipeline.

The following equipment is located at the Law Station:

Two (2) 660 hp Cooper GMXE-8 natural gas-fired reciprocating engines/integral compressors

- Emission unit ID: EN01 and EN02
- Emission point ID: EN01 and EN02

Two (2) 192.5 hp Cummins GGLA 7965803 emergency generators

- Emission unit ID: EG01 and EG02
- Emission point ID: EG01 and EG02

One (1) 0.771 MMBtu/hr Cameron natural gas-fired dehydration unit reboiler

- Emission unit ID: RBR02
- Emission point ID: RBR02

One (1) 9 MMscf/day dehydration unit/still column

- Emission unit ID: DEHY02
- Emission point ID: DEHY02

One (1) 4.0 MMBtu/hr dehydration unit controlled flare

- Emission unit ID: F1
- Emission point ID: F1

One (1) 4200-gallon vertical aboveground lube oil storage tank

- Emission unit ID: TK01
- Emission point ID: TK01

One (1) 4200-gallon vertical aboveground lube oil storage tank

- Emission unit ID: TK02
- Emission point ID: TK02

One (1) 1000-gallon vertical aboveground used oil storage tank

- Emission unit ID: TK04
- Emission point ID: TK04

One (1) 4200-gallon vertical aboveground produced fluids storage tank

- Emission unit ID: TK05
- Emission point ID: TK05

One (1) 500 gallon vertical aboveground wastewater storage tank

- Emission unit ID: TK06
- Emission point ID: TK06

One (1) 1000 gallon horizontal aboveground triethylene glycol storage tank

- Emission unit ID: TK07
- Emission point ID: TK07

One (1) 2000 gallon horizontal aboveground ethylene glycol storage tank

- Emission unit ID: TK08
- Emission point ID: TK08

SECTION 2

Title V Renewal Permit Application -
General Forms

WEST VIRGINIA DEPARTMENT OF ENVIRONMENTAL PROTECTION

DIVISION OF AIR QUALITY

601 57th Street SE

Charleston, WV 25304

Phone: (304) 926-0475

www.dep.wv.gov/daq

INITIAL/RENEWAL TITLE V PERMIT APPLICATION - GENERAL FORMS

Section 1: General Information

1. **Name of Applicant (As registered with the WV Secretary of State's Office):**
Eastern Gas Transmission and Storage, Inc.

2. Facility Name or Location:
Law Station

3. DAQ Plant ID No.:
0 3 3 — 0 0 0 1 4

4. Federal Employer ID No. (FEIN):
5 5 0 6 2 9 2 0 3

5. **Permit Application Type:**

☐ Initial Permit — When did operations commence? 1973

☒ Permit Renewal — What is the expiration date of the existing permit? 07/12/2021

☐ Update to Initial/Renewal Permit Application

6. Type of Business Entity:

☒ Corporation ☐ Governmental Agency ☐ LLC
☐ Partnership ☐ Limited Partnership

7. Is the Applicant the:

☐ Owner ☐ Operator ☒ Both

If the Applicant is not both the owner and operator, please provide the name and address of the other party.

_____

_____

_____

8. Number of onsite employees:

Usually unmanned

9. Governmental Code:

☒ Privately owned and operated; 0
☐ Federally owned and operated; 1
☐ State government owned and operated; 2
☐ County government owned and operated; 3
☐ Municipality government owned and operated; 4
☐ District government owned and operated; 5

10. Business Confidentiality Claims

Does this application include confidential information (per 45CSR31)? ☐ Yes ☒ No

If yes, identify each segment of information on each page that is submitted as confidential, and provide justification for each segment claimed confidential, including the criteria under 45CSR§31-4.1, and in accordance with the DAQ's *"PRECAUTIONARY NOTICE-CLAIMS OF CONFIDENTIALITY"* guidance.

11. Mailing Address		
Street or P.O. Box: 925 White Oaks Blvd.		
City: Bridgeport	**State:** WV	**Zip:** 26330
Telephone Number: (681) 842-3000	**Fax Number:** (681) 842-3323	

12. Facility Location		
Street: Two Lick Road	**City:** Good Hope	**County:** Harrison
UTM Easting: 545.88 km	**UTM Northing:** 4,335.35 km	**Zone:** ☒ 17 or ☐ 18
Directions: From Clarksburg, take Route 19 South through Good Hope for 11 miles. Turn right across iron bridge onto Two Lick Road. Go 1.1 miles then turn right through gate. Go 0.3 miles to station at top of hill.		
Portable Source? ☐ Yes ☒ No		
Is facility located within a nonattainment area? ☐ Yes ☒ No		**If yes, for what air pollutants?**
Is facility located within 50 miles of another state? ☒ Yes ☐ No		**If yes, name the affected state(s).** Pennsylvania Ohio
Is facility located within 100 km of a Class I Area[1]? ☒ Yes ☐ No **If no, do emissions impact a Class I Area[1]?** ☐ Yes ☐ No		**If yes, name the area(s).** Dolly Sods Wilderness Area Otter Creek Wilderness Area

[1] *Class I areas include Dolly Sods and Otter Creek Wilderness Areas in West Virginia, and Shenandoah National Park and James River Face Wilderness Area in Virginia.*

13. Contact Information		
Responsible Official: John M. Lamb		**Title:** Vice President, Pipeline Operations
Street or P.O. Box: 925 White Oaks Blvd.		
City: Bridgeport	**State:** WV	**Zip:** 26330
Telephone Number: (681) 842-3000	**Fax Number:** (681) 842-3323	
E-mail address: john.m.lamb@dominionenergy.com		
Environmental Contact: Andy Gates		**Title:** Environmental Consultant
Street or P.O. Box: 6603 W. Broad Street		
City: Richmond	**State:** VA	**Zip:** 23230
Telephone Number: (804) 389-1340	**Fax Number:** NA	
E-mail address: andy.gates@dominionenergy.com		
Application Preparer: Andy Gates		**Title:** Environmental Consultant
Company: BHE GT&S, LLC		
Street or P.O. Box: 6603 W. Broad Street		
City: Richmond	**State:** VA	**Zip:** 23230
Telephone Number: (804) 389-1340	**Fax Number:** NA	
E-mail address: andy.gates@dominionenergy.com		

14. Facility Description

List all processes, products, NAICS and SIC codes for normal operation, in order of priority. Also list any process, products, NAICS and SIC codes associated with any alternative operating scenarios if different from those listed for normal operation.

Process	Products	NAICS	SIC
Natural Gas Compressor Station	N/A	486120	4922

Provide a general description of operations.

The Law Station is a compressor facility that services a natural gas pipeline system. The purpose of the facility is to recompress natural gas flowing through a pipeline for transportation. The reciprocating engines (EN01 and EN02) at the facility receive natural gas from a valve on a pipeline and compress it to enable further transportation in the pipeline.

15. Provide an **Area Map** showing plant location as **ATTACHMENT A**.

16. Provide a **Plot Plan(s)**, e.g. scaled map(s) and/or sketch(es) showing the location of the property on which the stationary source(s) is located as **ATTACHMENT B**. For instructions, refer to "Plot Plan - Guidelines."

17. Provide a detailed **Process Flow Diagram(s)** showing each process or emissions unit as **ATTACHMENT C**. Process Flow Diagrams should show all emission units, control equipment, emission points, and their relationships.

Section 2: Applicable Requirements

18. Applicable Requirements Summary	
Instructions: Mark all applicable requirements.	
☒ SIP	☐ FIP
☒ Minor source NSR (45CSR13)	☐ PSD (45CSR14)
☐ NESHAP (45CSR34)	☐ Nonattainment NSR (45CSR19)
☒ Section 111 NSPS	☒ Section 112(d) MACT standards
☐ Section 112(g) Case-by-case MACT	☐ 112(r) RMP
☐ Section 112(i) Early reduction of HAP	☐ Consumer/commercial prod. reqts., section 183(e)
☐ Section 129 Standards/Reqts.	☐ Stratospheric ozone (Title VI)
☐ Tank vessel reqt., section 183(f)	☐ Emissions cap 45CSR§30-2.6.1
☐ NAAQS, increments or visibility (temp. sources)	☐ 45CSR27 State enforceable only rule
☒ 45CSR4 State enforceable only rule	☐ Acid Rain (Title IV, 45CSR33)
☐ Emissions Trading and Banking (45CSR28)	☐ **C**ompliance **A**ssurance **M**onitoring (40CFR64)
☐ CAIR NO_x Annual Trading Program (45CSR39)	☐ CAIR NO_x Ozone Season Trading Program (45CSR40)
☐ CAIR SO_2 Trading Program (45CSR41)	

19. Non Applicability Determinations

List all requirements which the source has determined not applicable and for which a permit shield is requested. The listing shall also include the rule citation and the reason why the shield applies.

40 CFR Subpart JJJJ – The compressor engines (EN01 and EN02) are not subject to this subpart since they were manufactured in 1973, before the applicability date.

40 CFR 60 Subpart OOOO – This subpart does not apply to the facility since the facility is a gathering facility that does not have tanks, gas wells, centrifugal compressors, reciprocating compressors, and/or pneumatic controllers constructed, modified, or reconstructed after August 23, 2011.
40 CFR 60, Subpart OOOOa –This facility has no equipment with applicable requirements under Subpart OOOOa. This subpart applies to equipment installed after September 18, 2015. The facility has no affected emissions units that have been installed after the applicable Subpart OOOOa effective date.

40 CFR 63 Subpart HHH – This subpart does not apply to the facility since the facility is not a transmission or storage station and is not a major source of HAPs.

40 CFR 63 Subpart DDDDD – The reboiler (RBR02) is not subject to this subpart since it is exempt by §63.7491(h) and facility is not major source of HAPs.

40 CFR 63 Subpart JJJJJJ – The reboiler (RBR02) is not applicable to this subpart since it is considered a "process heater," which is excluded from the definition of "boiler".

40 CFR 64 CAM – The dehy unit (DEHY02) is not applicable to CAM since the unit is subject to NESHAP Subpart HH, which has provisions for compliance monitoring established after 1990 (exemption per 64.2(b)(1)(i)). In addition, since the R13-2963 permit specifies a "continuous compliance determination method" condition (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) which was included in the Title V permit, CAM does not apply (exemption per 64.2(b)(1)(vi)).

☒ Permit Shield

20. Facility-Wide Applicable Requirements

List all facility-wide applicable requirements. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*).

45 CSR 6-3.1 – Open burning prohibited (TV 3.1.1)
45 CSR 6-3.2 – Open burning exemption (TV 3.1.2)
40 CFR Part 61 and 45 CSR 34 – Asbestos inspection and removal (TV 3.1.3)
State Only: 45 CSR 4-3.1 – No objectionable odors (TV 3.1.4)
45 CSR 11-5.2 – Standby plans for emergency episodes (TV 3.1.5)
WV Code 22-5-4 (a) (14) – The annual emission inventory reporting (TV 3.1.6)
40 CFR Part 82 Subpart F – Ozone depleting substances (TV 3.1.7)
40 CFR Part 68 – Risk Management Plan (TV 3.1.8)
45 CSR 13 – Operation and maintenance of air pollution control equipment (TV 3.1.9; R13-2963 4.1.3)
State Only: 45 CSR 17-3.1 – Fugitive particulate matter (TV 3.1.10)

☒ Permit Shield

For all facility-wide applicable requirements listed above, provide monitoring/testing / recordkeeping / reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number and/or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 6-3.1 – The permittee shall prohibit open burning (TV 3.1.1)
45 CSR 6-3.2 – The permittee shall notify if open burning occurs (TV 3.1.2)
40 CFR Part 61 and 45 CSR 34 – Prior to demolition/construction buildings will be inspected for asbestos (TV 3.1.3)
45 CSR 4 – Permittee shall maintain records of all odor complaints received (TV 3.1.4)
45 CSR 11 – Upon request by the Secretary, the permittee shall prepare a standby plan (TV 3.1.5)
WV 22-5-4 – The permittee shall submit annual emission inventory reports (TV 3.1.6)
40 CFR Part 82 Subpart F – The permittee will prohibit maintenance, service, or repair of appliances containing Ozone depleting substances (TV 3.1.7)
40 CFR Part 68 – Should the permittee become subject to 40 CFR Part 68, a RMP shall be submitted (TV 3.1.8)
45 CSR 13 – The permittee shall install, maintain, and operate control equipment properly for minimizing emissions (TV 3.1.9; R13-2963 4.1.3)
45 CSR 17 – The permittee will limit fugitive emissions from the facility by burning only pipeline quality natural gas (TV 3.1.10)
WV Code 22—5-4(a)(14-15) and 45 CSR 13 – Testing requirements (TV 3.3.1)
45 CSR 30 – Recordkeeping Requirements (TV 3.4)
45 CSR 30 – Reporting Requirements (TV 3.5)
45 CSR 30 - The permittee shall submit a certified emissions statement and pay fees annually (TV 3.5.4)
45 CSR 30 - The permittee shall submit semi-annual monitoring reports (TV 3.5.6)

Are you in compliance with all facility-wide applicable requirements? ☒ Yes ☐ No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

21. Active Permits/Consent Orders		
Permit or Consent Order Number	Date of Issuance MM/DD/YYYY	List any Permit Determinations that Affect the Permit *(if any)*
G60-C041	10/13/2011	N/A
R13-2963	04/03/2013	N/A

22. Inactive Permits/Obsolete Permit Conditions		
Permit Number	Date of Issuance	Permit Condition Number
N/A		

Section 3: Facility-Wide Emissions

23. Facility-Wide Emissions Summary [Tons per Year]	
Criteria Pollutants	Potential Emissions
Carbon Monoxide (CO)	38.62
Nitrogen Oxides (NO_X)	259.40
Lead (Pb)	N/A
Particulate Matter ($PM_{2.5}$)[1]	1.84
Particulate Matter (PM_{10})[1]	1.84
Total Particulate Matter (TSP)	2.33
Sulfur Dioxide (SO_2)	0.03
Volatile Organic Compounds (VOC)	100.70
Hazardous Air Pollutants[2]	Potential Emissions
Acetaldehyde	0.37
Acrolein	0.37
Benzene	0.27
Ethylbenzene	0.11
Formaldehyde	2.64
Hexane	0.14
Toluene	0.48
Xylene	0.66
Regulated Pollutants other than Criteria and HAP	Potential Emissions

[1] *$PM_{2.5}$ and PM_{10} are components of TSP.*

[2] *For HAPs that are also considered PM or VOCs, emissions should be included in both the HAPs section and the Criteria Pollutants section.*

Potentials-to-emit are based on currently operating equipment and permit limits as applicable and include fugitive VOC (including pigging and blowdowns).

Section 4: Insignificant Activities

24. Insignificant Activities (Check all that apply)		
☒	1.	Air compressors and pneumatically operated equipment, including hand tools.
☐	2.	Air contaminant detectors or recorders, combustion controllers or shutoffs.
☐	3.	Any consumer product used in the same manner as in normal consumer use, provided the use results in a duration and frequency of exposure which are not greater than those experienced by consumer, and which may include, but not be limited to, personal use items; janitorial cleaning supplies, office supplies and supplies to maintain copying equipment.
☒	4.	Bathroom/toilet vent emissions.
☒	5.	Batteries and battery charging stations, except at battery manufacturing plants.
☐	6.	Bench-scale laboratory equipment used for physical or chemical analysis, but not lab fume hoods or vents. Many lab fume hoods or vents might qualify for treatment as insignificant (depending on the applicable SIP) or be grouped together for purposes of description.
☐	7.	Blacksmith forges.
☒	8.	Boiler water treatment operations, not including cooling towers.
☐	9.	Brazing, soldering or welding equipment used as an auxiliary to the principal equipment at the source.
☐	10.	CO_2 lasers, used only on metals and other materials which do not emit HAP in the process.
☐	11.	Combustion emissions from propulsion of mobile sources, except for vessel emissions from Outer Continental Shelf sources.
☒	12.	Combustion units designed and used exclusively for comfort heating that use liquid petroleum gas or natural gas as fuel.
☒	13.	Comfort air conditioning or ventilation systems not used to remove air contaminants generated by or released from specific units of equipment.
☐	14.	Demineralized water tanks and demineralizer vents.
☐	15.	Drop hammers or hydraulic presses for forging or metalworking.
☐	16.	Electric or steam-heated drying ovens and autoclaves, but not the emissions from the articles or substances being processed in the ovens or autoclaves or the boilers delivering the steam.
☐	17.	Emergency (backup) electrical generators at residential locations.
☐	18.	Emergency road flares.
☐	19.	Emission units which do not have any applicable requirements and which emit criteria pollutants (CO, NO_x, SO_2, VOC and PM) into the atmosphere at a rate of less than 1 pound per hour and less than 10,000 pounds per year aggregate total for each criteria pollutant from all emission units. Please specify all emission units for which this exemption applies along with the quantity of criteria pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____ _____ _____ _____ _____

24. Insignificant Activities (Check all that apply)		
☐	20.	Emission units which do not have any applicable requirements and which emit hazardous air pollutants into the atmosphere at a rate of less than 0.1 pounds per hour and less than 1,000 pounds per year aggregate total for all HAPs from all emission sources. This limitation cannot be used for any source which emits dioxin/furans nor for toxic air pollutants as per 45CSR27. Please specify all emission units for which this exemption applies along with the quantity of hazardous air pollutants emitted on an hourly and annual basis: _____ _____ _____ _____ _____
☐	21.	Environmental chambers not using hazardous air pollutant (HAP) gases.
☒	22.	Equipment on the premises of industrial and manufacturing operations used solely for the purpose of preparing food for human consumption.
☐	23.	Equipment used exclusively to slaughter animals, but not including other equipment at slaughterhouses, such as rendering cookers, boilers, heating plants, incinerators, and electrical power generating equipment.
☐	24.	Equipment used for quality control/assurance or inspection purposes, including sampling equipment used to withdraw materials for analysis.
☐	25.	Equipment used for surface coating, painting, dipping or spray operations, except those that will emit VOC or HAP.
☒	26.	Fire suppression systems.
☐	27.	Firefighting equipment and the equipment used to train firefighters.
☐	28.	Flares used solely to indicate danger to the public.
☒	29.	Fugitive emission related to movement of passenger vehicle provided the emissions are not counted for applicability purposes and any required fugitive dust control plan or its equivalent is submitted.
☐	30.	Hand-held applicator equipment for hot melt adhesives with no VOC in the adhesive formulation.
☒	31.	Hand-held equipment for buffing, polishing, cutting, drilling, sawing, grinding, turning or machining wood, metal or plastic.
☐	32.	Humidity chambers.
☐	33.	Hydraulic and hydrostatic testing equipment.
☐	34.	Indoor or outdoor kerosene heaters.
☒	35.	Internal combustion engines used for landscaping purposes.
☐	36.	Laser trimmers using dust collection to prevent fugitive emissions.
☐	37.	Laundry activities, except for dry-cleaning and steam boilers.
☐	38.	Natural gas pressure regulator vents, excluding venting at oil and gas production facilities.
☐	39.	Oxygen scavenging (de-aeration) of water.
☐	40.	Ozone generators.

24. Insignificant Activities (Check all that apply)		
☒	41.	Plant maintenance and upkeep activities (e.g., grounds-keeping, general repairs, cleaning, painting, welding, plumbing, re-tarring roofs, installing insulation, and paving parking lots) provided these activities are not conducted as part of a manufacturing process, are not related to the source's primary business activity, and not otherwise triggering a permit modification. (Cleaning and painting activities qualify if they are not subject to VOC or HAP control requirements. Asphalt batch plant owners/operators must still get a permit if otherwise requested.)
☐	42.	Portable electrical generators that can be moved by hand from one location to another. "Moved by Hand" means that it can be moved without the assistance of any motorized or non-motorized vehicle, conveyance, or device.
☐	43.	Process water filtration systems and demineralizers.
☒	44.	Repair or maintenance shop activities not related to the source's primary business activity, not including emissions from surface coating or de-greasing (solvent metal cleaning) activities, and not otherwise triggering a permit modification.
☒	45.	Repairs or maintenance where no structural repairs are made and where no new air pollutant emitting facilities are installed or modified.
☐	46.	Routing calibration and maintenance of laboratory equipment or other analytical instruments.
☐	47.	Salt baths using nonvolatile salts that do not result in emissions of any regulated air pollutants. Shock chambers.
☐	48.	Shock chambers.
☐	49.	Solar simulators.
☐	50.	Space heaters operating by direct heat transfer.
☐	51.	Steam cleaning operations.
☐	52.	Steam leaks.
☐	53.	Steam sterilizers.
☐	54.	Steam vents and safety relief valves.
☐	55.	Storage tanks, reservoirs, and pumping and handling equipment of any size containing soaps, vegetable oil, grease, animal fat, and nonvolatile aqueous salt solutions, provided appropriate lids and covers are utilized.
☐	56.	Storage tanks, vessels, and containers holding or storing liquid substances that will not emit any VOC or HAP. Exemptions for storage tanks containing petroleum liquids or other volatile organic liquids should be based on size limits such as storage tank capacity and vapor pressure of liquids stored and are not appropriate for this list.
☐	57.	Such other sources or activities as the Director may determine.
☐	58.	Tobacco smoking rooms and areas.
☐	59.	Vents from continuous emissions monitors and other analyzers.

Section 5: Emission Units, Control Devices, and Emission Points

25. Equipment Table

Fill out the **Title V Equipment Table** and provide it as **ATTACHMENT D**.

26. Emission Units

For each emission unit listed in the **Title V Equipment Table**, fill out and provide an **Emission Unit Form** as **ATTACHMENT E**.

For each emission unit not in compliance with an applicable requirement, fill out a **Schedule of Compliance Form** as **ATTACHMENT F**.

27. Control Devices

For each control device listed in the **Title V Equipment Table**, fill out and provide an **Air Pollution Control Device Form** as **ATTACHMENT G**.

For any control device that is required on an emission unit in order to meet a standard or limitation for which the potential pre-control device emissions of an applicable regulated air pollutant is greater than or equal to the Title V Major Source Threshold Level, refer to the **Compliance Assurance Monitoring (CAM) Form(s)** for CAM applicability. Fill out and provide these forms, if applicable, for each Pollutant Specific Emission Unit (PSEU) as **ATTACHMENT H**.

Section 6: Certification of Information

28. Certification of Truth, Accuracy and Completeness and Certification of Compliance

*Note: This Certification must be signed by a responsible official. The **original**, signed in **blue ink**, must be submitted with the application. Applications without an **original** signed certification will be considered as incomplete.*

a. Certification of Truth, Accuracy and Completeness

I certify that I am a responsible official (as defined at 45CSR§30-2.38) and am accordingly authorized to make this submission on behalf of the owners or operators of the source described in this document and its attachments. I certify under penalty of law that I have personally examined and am familiar with the statements and information submitted in this document and all its attachments. Based on my inquiry of those individuals with primary responsibility for obtaining the information, I certify that the statements and information are to the best of my knowledge and belief true, accurate, and complete. I am aware that there are significant penalties for submitting false statements and information or omitting required statements and information, including the possibility of fine and/or imprisonment.

b. Compliance Certification

Except for requirements identified in the Title V Application for which compliance is not achieved, I, the undersigned hereby certify that, based on information and belief formed after reasonable inquiry, all air contaminant sources identified in this application are in compliance with all applicable requirements.

Responsible official (type or print)

Name: John M. Lamb	Title: Vice President, Pipeline Operations

Responsible official's signature:

Signature: _____ Signature Date: 1/8/2021

(Must be signed and dated in blue ink)

Note: Please check all applicable attachments included with this permit application:

☒	ATTACHMENT A: Area Map
☒	ATTACHMENT B: Plot Plan(s)
☒	ATTACHMENT C: Process Flow Diagram(s)
☒	ATTACHMENT D: Equipment Table
☒	ATTACHMENT E: Emission Unit Form(s)
☐	ATTACHMENT F: Schedule of Compliance Form(s)
☒	ATTACHMENT G: Air Pollution Control Device Form(s)
☐	ATTACHMENT H: Compliance Assurance Monitoring (CAM) Form(s)

All of the required forms and additional information can be found and downloaded from, the DEP website at www.dep.wv.gov/daq, requested by phone (304) 926-0475, and/or obtained through the mail.

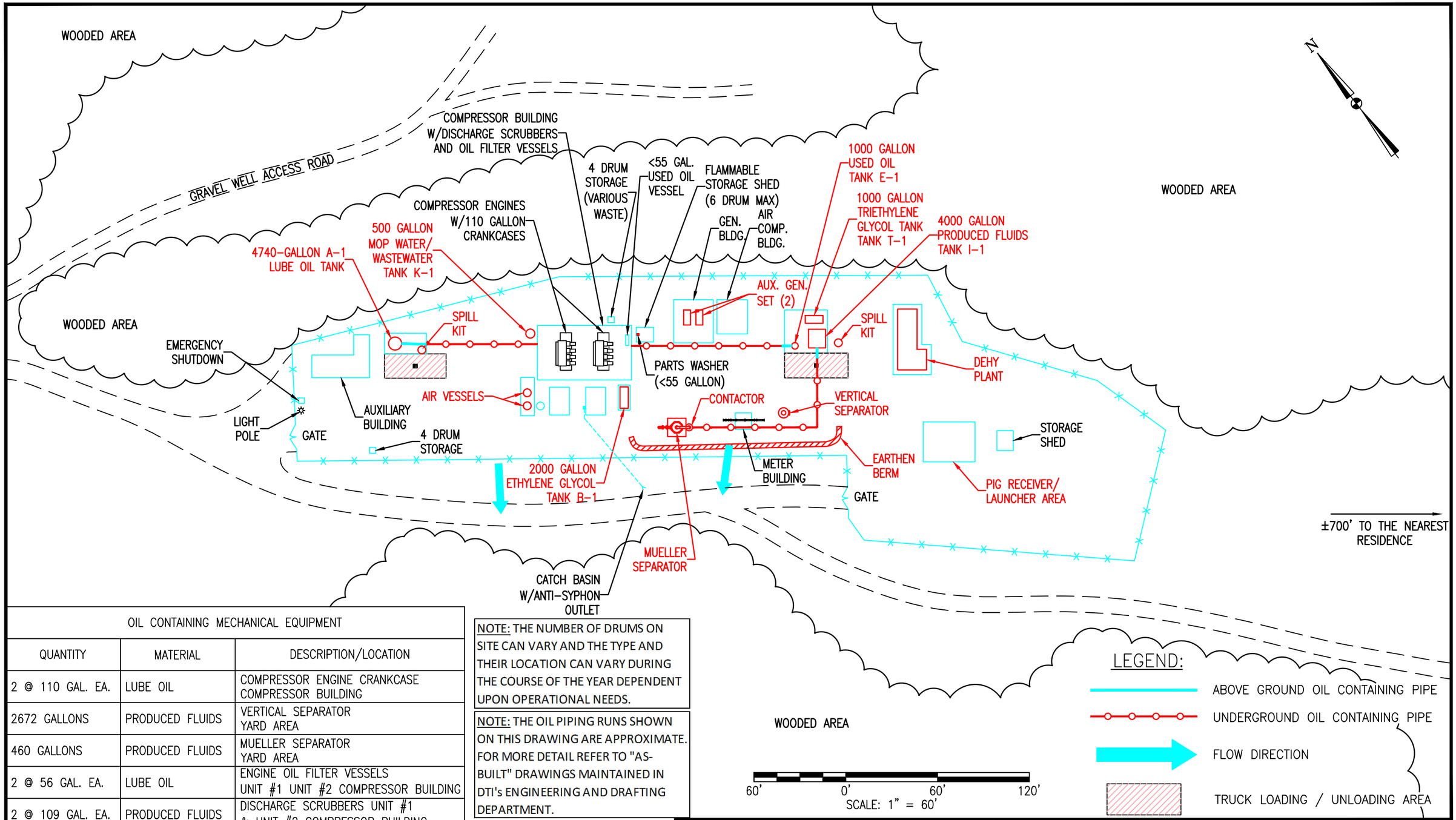
Attachment A

Area Map


Eastern Gas Transmission and Storage, Inc.
Law Compressor Station
Facility 033-00014
Law Compressor Station
38/2
Hitt Rd
19/48
19/18
19/66
1st
Oak St
19
Burnside
3000 ft
N
Google Earth
©2020 Google

Attachment B

Plot Plan



OIL CONTAINING MECHANICAL EQUIPMENT		
QUANTITY	MATERIAL	DESCRIPTION/LOCATION
2 @ 110 GAL. EA.	LUBE OIL	COMPRESSOR ENGINE CRANKCASE COMPRESSOR BUILDING
2672 GALLONS	PRODUCED FLUIDS	VERTICAL SEPARATOR YARD AREA
460 GALLONS	PRODUCED FLUIDS	MUELLER SEPARATOR YARD AREA
2 @ 56 GAL. EA.	LUBE OIL	ENGINE OIL FILTER VESSELS UNIT #1 UNIT #2 COMPRESSOR BUILDING
2 @ 109 GAL. EA.	PRODUCED FLUIDS	DISCHARGE SCRUBBERS UNIT #1 & UNIT #2 COMPRESSOR BUILDING

NOTE: THE NUMBER OF DRUMS ON SITE CAN VARY AND THE TYPE AND THEIR LOCATION CAN VARY DURING THE COURSE OF THE YEAR DEPENDENT UPON OPERATIONAL NEEDS.

NOTE: THE OIL PIPING RUNS SHOWN ON THIS DRAWING ARE APPROXIMATE. FOR MORE DETAIL REFER TO "AS-BUILT" DRAWINGS MAINTAINED IN DTI's ENGINEERING AND DRAFTING DEPARTMENT.

SYM.	DATE	BY	REVISION DESCRIPTION	PRJ/TSK	APP.
6	08/09/18	JAL	ADDED (2) SPILL KITS, 4 DRUM STORAGE, STORAGE SHED, (2) AUX. GENERATORS, ETC		
5	11/03/2017	JAR	CHANGE LUBE OIL TANK A-2 TO TANK A-1 AND CHANGED CAPACITY TO 4740 GALLONS	71177.1.3	
4	04/25/2017	JAR	DELETED LUBE OIL TANK A-1		
3	02/22/16	TBB	REVISED TANK A-1 & K-1; ADDED UNDEGROUND PIPING; REVISED DTI ADDRESS & PHONE #		
2	11/04/14	TBB	SCALED, ADDED BAR SCALE, ADDED ADJACENT PROPERTIES, & REVISED NORTH ARROW		

SCALE	1" = 60'	DATE
DRAWN	SE TECH	
CHECKED		
APP. FOR BID		
APP. FOR CONST.		
TOWN:	JANE LEW, WV	COUNTY: HARRISON

Dominion Energy

Dominion Energy Transmission, Inc.
925 White Oaks Blvd., Bridgeport, WV 26330
(681) 842-3000

FOR: LAW COMPRESSOR STATION

TITLE: ENVIRONMENTAL EMERGENCY SITE PLAN

DIR: DOCUMENTUM		GROUP	DWG. NO.	REV.
FILE:	PRJ/TSK:	PD	X6102B	6

Printed: Aug 09, 2018 @10:19, By: josh402, Filename: PDX6102B_NEW.dwg

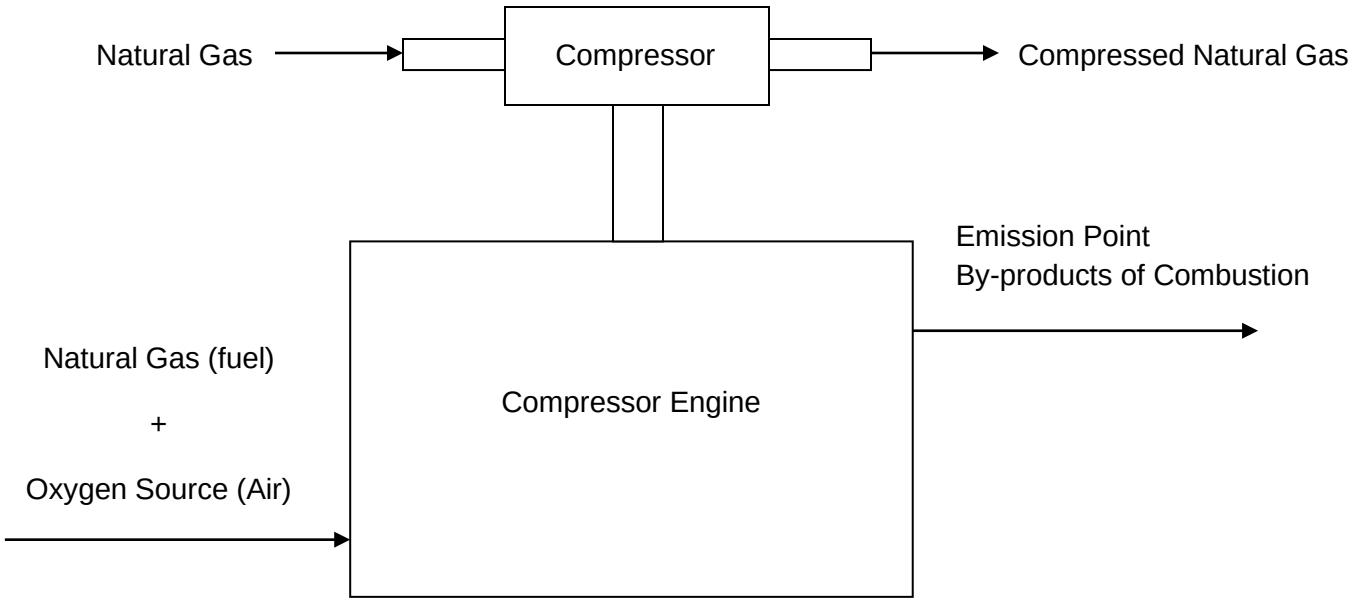
Attachment C

Process Flow Diagrams

Eastern Gas Transmission and Storage, Inc.

Law Compressor Station

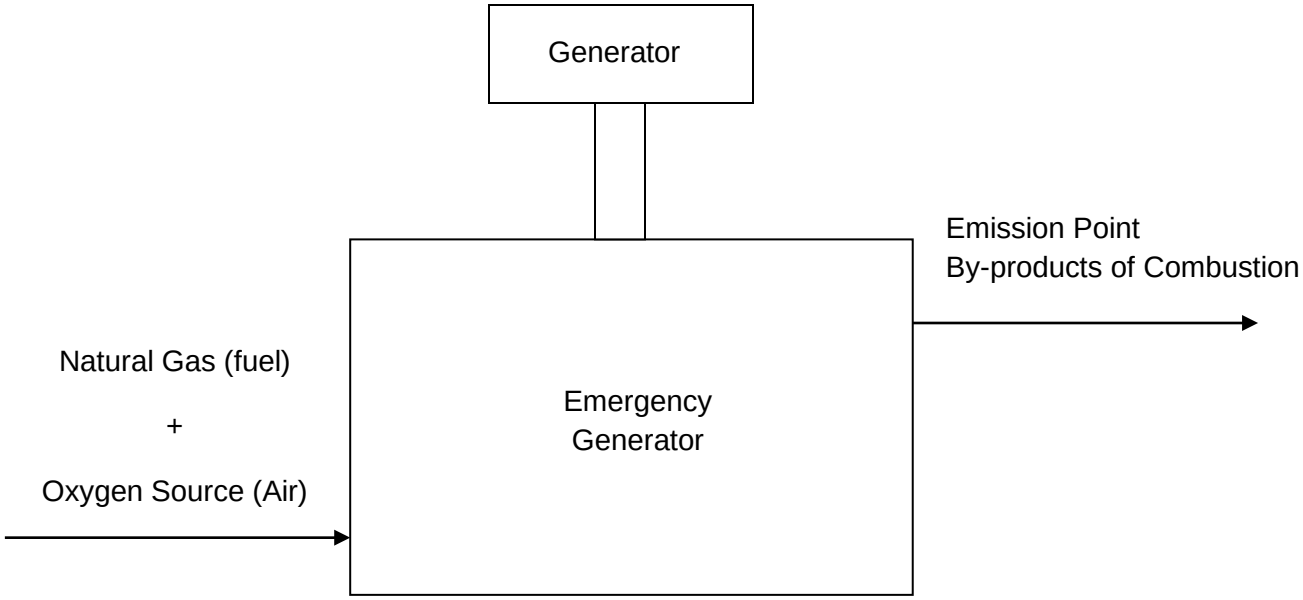
Compressor Engines (EN01 and EN02) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.

Law Compressor Station

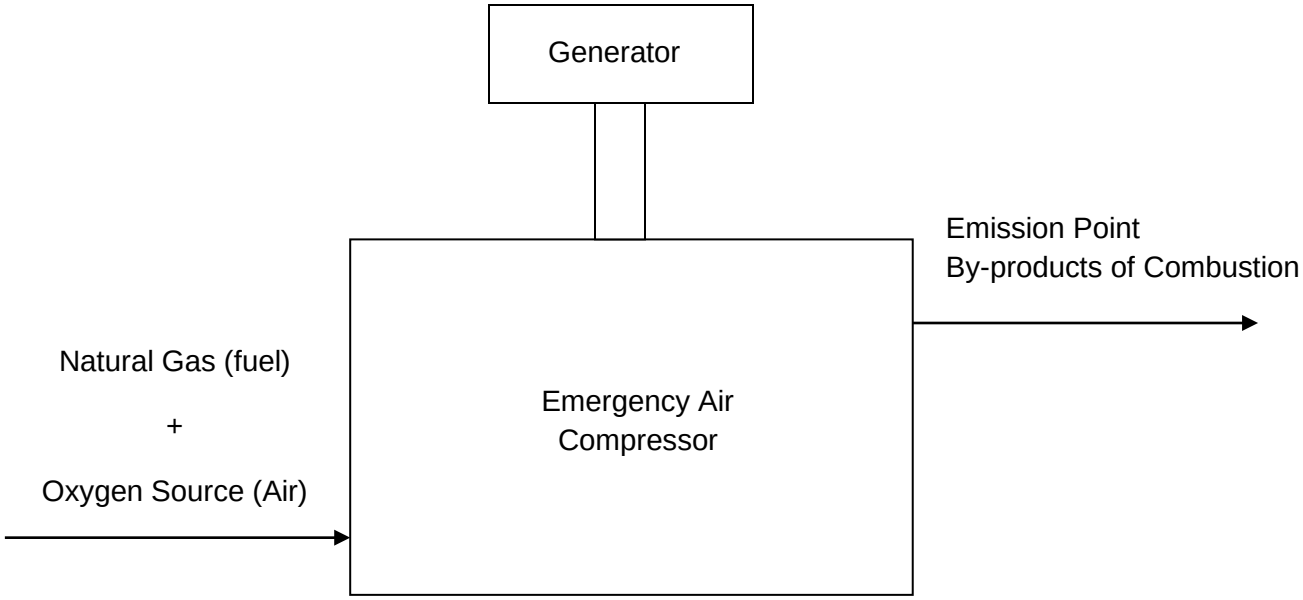
Emergency Generators (EG01 and EG02) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.

Law Compressor Station

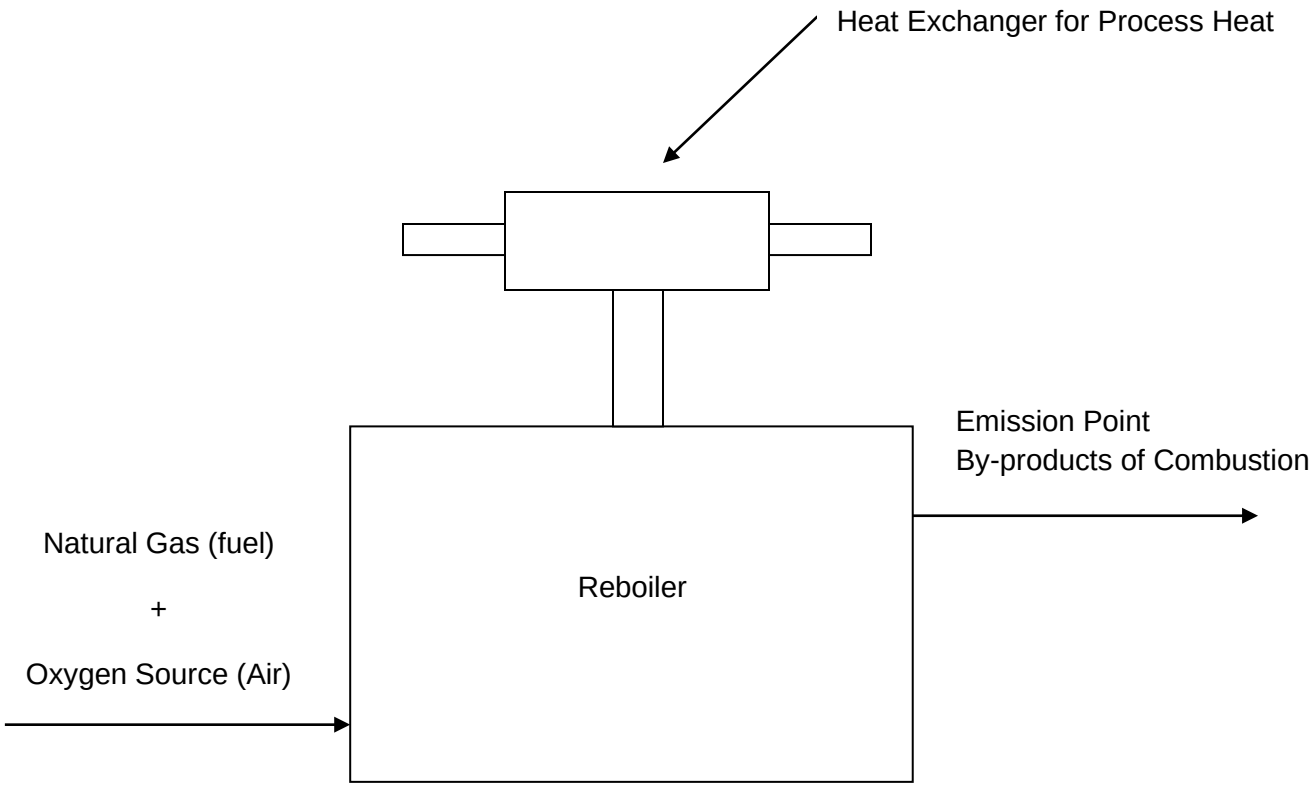
Emergency Air Compressor (CPR02) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.

Law Compressor Station

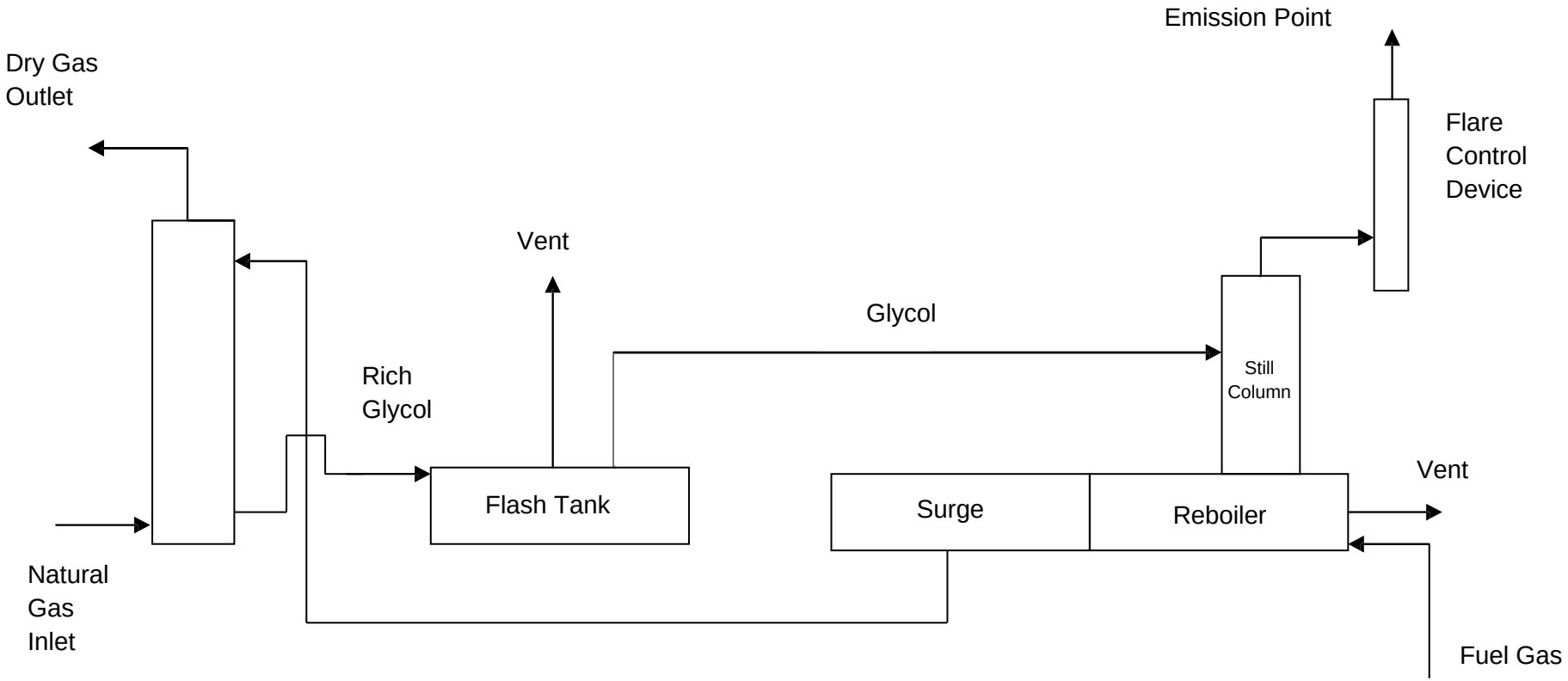
Reboiler (RBR02) Process Flow Diagram



Eastern Gas Transmission and Storage, Inc.

Law Compressor Station

Dehydration Unit (F1, DEHY02, and RBR02) Process Flow Diagram



Attachment D

Title V Equipment Table

ATTACHMENT D - Title V Equipment Table

(includes all emission units at the facility except those designated as insignificant activities in Section 4, Item 24 of the General Forms)

Emission Point ID[1]	Control Device[1]	Emission Unit ID[1]	Emission Unit Description	Design Capacity	Year Installed/ Modified
EN01	N/A	EN01	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	660 hp	1973
EN02	N/A	EN02	Reciprocating Engine/Integral Compressor; Cooper GMXE-8	660 hp	1973
EG01	N/A	EG01	Cummins GM8.1L	192.5 hp	2012
EG02	N/A	EG02	Cummins GM8.1L	192.5 hp	2012
DEHY02	F1	DEHY02	Dehydration Unit Still; Cameron	9 MMscf/day	2013
RBR02	N/A	RBR02	Dehydration Unit Boiler; Cameron	0.77 MMBtu/hr	2013
F1	N/A	F1	Dehydration Unit Flare; QTI, Q100	4.0 MMBtu/hr	2013
TK01	N/A	TK01	Vertical, aboveground tank containing lube oil	4,200 Gallons	1973
TK02	N/A	TK02	Vertical, aboveground tank containing lube oil	4,200 Gallons	1973
TK03	N/A	TK03	Horizontal, aboveground tank containing drip gas	2,000 Gallons	1989
TK04	N/A	TK04	Vertical, aboveground tank containing used oil	5,075 Gallons	1972
TK05	N/A	TK05	Vertical, aboveground tank containing produced fluids	4,200 Gallons	1973
TK06	N/A	TK06	Vertical, aboveground tank containing wastewater	500 Gallons	2003
TK07	N/A	TK07	Horizontal, aboveground tank containing triethylene glycol	1,000 Gallons	1973
TK08	N/A	TK08	Horizontal, aboveground tank containing ethylene glycol	2,000 Gallons	1986

[1]For 45CSR13 permitted sources, the numbering system used for the emission points, control devices, and emission units should be consistent with the numbering system used in the 45CSR13 permit. For grandfathered sources, the numbering system should be consistent with registrations or emissions inventory previously submitted to DAQ. For emission points, control devices, and emissions units which have not been previously labeled, use the following 45CSR13 numbering system: 1S, 2S, 3S,... or other appropriate description for emission units; 1C, 2C, 3C,... or other appropriate designation for control devices; 1E, 2E, 3E, ... or other appropriate designation for emission points.

Attachment E

Emission Unit Forms

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
EN01	EN01 Reciprocating Engine/Integral Compressor	N/A

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer:	**Model number:**	**Serial number:**
Cooper	GMXE-8	46692
Construction date:	**Installation date:**	**Modification date(s):**
	1973	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
660 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
0.0054 MMscf/hr	47.3 MMscf/yr	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 660 hp	**Type and Btu/hr rating of burners:** 8,200 Btu/hp-hr 0.0054 MMscf/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
- Maximum hourly fuel usage = 0.0054 MMscf/hr
- Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO_X)	29.5	129.4
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	0.21	0.91
Particulate Matter (PM_{10})	0.21	0.91
Total Particulate Matter (TSP)	0.26	1.15
Sulfur Dioxide (SO_2)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Benzene	0.01	0.05
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.08	0.35
Hexane	< 0.01	0.01
Toluene	0.01	0.02
Xylene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

- CO, NOx, and VOC Emission Factors based on manufacturer's information.
- PM10, PM2.5, SO2, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 6.1.1 and 6.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 6.1.3 and 6.1.5)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 6.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 6.4.1, 6.4.2, 6.4.3, and 6.4.4)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 6.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 6.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 6.1.3 and 6.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 6.2.1, 6.4.1, 6.4.2, 6.4.3, and 6.4.4)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
EN02	EN02 Reciprocating Engine/Integral Compressor	N/A

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired reciprocating engine/integral compressor

Manufacturer:	**Model number:**	**Serial number:**
Cooper	GMXE-8	46693
Construction date:	**Installation date:**	**Modification date(s):**
	1973	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
660 hp

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
0.0054 MMscf/hr	47.3 MMscf/yr	8,760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 660 hp	**Type and Btu/hr rating of burners:** 8,200 Btu/hp-hr 0.0054 MMscf/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Pipeline quality natural gas
- Maximum hourly fuel usage = 0.0054 MMscf/hr
- Maximum annual fuel usage = 47.3 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Pipeline quality natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	4.37	19.12
Nitrogen Oxides (NO_X)	29.5	129.4
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	0.21	0.91
Particulate Matter (PM_{10})	0.21	0.91
Total Particulate Matter (TSP)	0.26	1.15
Sulfur Dioxide (SO_2)	< 0.01	0.014
Volatile Organic Compounds (VOC)	3.30	14.5
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	0.04	0.18
Acrolein	0.04	0.18
Benzene	0.01	0.05
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.08	0.35
Hexane	< 0.01	0.01
Toluene	0.01	0.02
Xylene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

- CO, NOx, and VOC Emission Factors based on manufacturer's information.
- PM10, PM2.5, SO2, and HAP emission factors based on AP-42 Section 3.2, Table 3.2-1.

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

40 CFR Part 63 Subpart ZZZZ – NESHAP maintenance requirements (TV 6.1.1 and 6.1.4)
40 CFR Part 63 Subpart ZZZZ – NESHAP general requirements/provisions (TV 6.1.3 and 6.1.5)
40 CFR Part 63 Subpart ZZZZ – NESHAP monitoring requirements (TV 6.2.1)
40 CFR Part 63 Subpart ZZZZ – NESHAP recordkeeping requirements (TV 6.4.1, 6.4.2, 6.4.3, and 6.4.4)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

40 CFR Part 63 Subpart ZZZZ – Change oil and filter, inspect spark plugs, and inspect all hoses and belts every 4,320 hours of operation or annually, whichever comes first (TV 6.1.1)
40 CFR Part 63 Subpart ZZZZ – Operate and maintain the RICE according to the manufacturer's instructions OR develop and follow your own maintenance plan (TV 6.1.4)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable general requirements/provisions (TV 6.1.3 and 6.1.5)
40 CFR Part 63 Subpart ZZZZ – Comply with all applicable monitoring, recordkeeping, and reporting requirements (TV 6.2.1, 6.4.1, 6.4.2, 6.4.3, and 6.4.4)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
EG01	Emergency Generator	NSCR – Non-Selective Catalytic Reduction

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired emergency auxiliary generator

Manufacturer:	**Model number:**	**Serial number:**
Cummins	GM8.1L (Engine) GGLA 7965803 (GenSet)	I110250720
Construction date:	**Installation date:**	**Modification date(s):**
2011	2012	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
192.5 hp / 1800 rpm

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,667 cf/hr	0.834 MMcf/yr	500 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 192.5 hp / 1800 rpm	**Type and Btu/hr rating of burners:** 1.667 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas
- Maximum hourly fuel usage = 1,667 cf/hr
- Maximum annual fuel usage = 0.834 MMcf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.39	0.10
Nitrogen Oxides (NO_X)	0.03	0.01
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	0.02	< 0.01
Particulate Matter (PM_{10})	0.02	< 0.01
Total Particulate Matter (TSP)	0.03	0.01
Sulfur Dioxide (SO_2)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.19	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	< 0.01	< 0.01
Acrolein	< 0.01	< 0.01
Benzene	< 0.01	< 0.01
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.03	0.01
Toluene	< 0.01	< 0.01
Xylene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

- CO, NOx, and VOC emission rates are based on manufacturer's emission data sheet.
- All other emission rates are based on USEPA's AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, 7/00

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – Operate and maintain according to manufacturer (TV 7.1.1; G60-C041 5.1.1)
45 CSR 13 – Emission limits (TV 7.1.2; G60-C041 5.1.2)
45 CSR 13 – Maximum fuel consumption (TV 7.1.3; G60-C041 5.1.3)
40 CFR Part 60 Subpart JJJJ – NSPS emission limits (TV 7.1.6; G60-C041 8.2.5)
40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (TV 7.1.12; G60-C041 8.4.4)
40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source (40 CFR 63 Subpart ZZZZ)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 13 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (TV 7.4.1; G60-C041 5.4.1)
40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C041 8.4.1)
40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter (G60-C041 8.3.8)
40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C041 8.6.1)
40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
EG02	Emergency Generator	NSCR – Non-Selective Catalytic Reducer

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Natural gas-fired emergency auxiliary generator

Manufacturer:	**Model number:**	**Serial number:**
Cummins	GM8.1L (Engine) GGLA 7965803 (GenSet)	I110250721
Construction date:	**Installation date:**	**Modification date(s):**
2011	2012	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
192.5 hp / 1800 rpm

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
1,667 cf/hr	0.834 MMcf/yr	500 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** ___ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 192.5 hp / 1800 rpm	**Type and Btu/hr rating of burners:** 1.667 MMBtu/hr

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas
- Maximum hourly fuel usage = 1,667 cf/hr
- Maximum annual fuel usage = 0.834 MMcf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.39	0.10
Nitrogen Oxides (NO_X)	0.03	0.01
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	0.02	< 0.01
Particulate Matter (PM_{10})	0.02	< 0.01
Total Particulate Matter (TSP)	0.03	0.01
Sulfur Dioxide (SO_2)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.19	0.05
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Acetaldehyde	< 0.01	< 0.01
Acrolein	< 0.01	< 0.01
Benzene	< 0.01	< 0.01
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	0.03	0.01
Toluene	< 0.01	< 0.01
Xylene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

- CO, NOx, and VOC emission rates are based on manufacturer's emission data sheet.
- All other emission rates were based off of USEPA's AP-42, Section 3.2, Natural Gas-Fired Reciprocating Engines, 7/00

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – Operate and maintain according to manufacturer (TV 7.1.1; G60-C041 5.1.1)
45 CSR 13 – Emission limits (TV 7.1.2; G60-C041 5.1.2)
45 CSR 13 – Maximum fuel consumption (TV 7.1.3; G60-C041 5.1.3)
40 CFR Part 60 Subpart JJJJ – NSPS emission limits (TV 7.1.6; G60-C041 8.2.5)
40 CFR Part 60 Subpart JJJJ – NSPS emergency definition; limitation on maintenance and readiness testing to 100 hrs/yr (TV 7.1.12; G60-C041 8.4.4)
40 CFR Part 63 Subpart ZZZZ – RICE NESHAP as a new, emergency, spark ignition engine at an area source (40 CFR 63 Subpart ZZZZ)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 13 – Record hours of operation and fuel consumption on a monthly basis; keep records for 5 years (TV 7.4.1; G60-C041 5.4.1)
40 CFR Part 60 Subpart JJJJ – Purchase a certified engine to meet NSPS emission limits (G60-C041 8.4.1)
40 CFR Part 60 Subpart JJJJ – Install non-resettable hour meter (G60-C041 8.3.8)
40 CFR Part 60 Subpart JJJJ – Comply with all applicable monitoring, reports, and recordkeeping requirements (G60-C041 8.6.1)
40 CFR Part 63 Subpart ZZZZ – Compliance with NSPS Subpart JJJJ shows compliance with NESHAP Subpart ZZZZ

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
DEHY02	DEHY02 Dehydration Unit	F1

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

Dehydration unit still column

Manufacturer:	**Model number:**	**Serial number:**
Cameron	300/550	

Construction date:	**Installation date:**	**Modification date(s):**
2013	2013	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
9 MMscf wet gas /day

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
9 MMscf wet gas /day	3,285 MMscf wet gas/yr	8760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? ___Yes _X__ No	**If yes, is it?** ___ Indirect Fired ___Direct Fired
Maximum design heat input and/or maximum horsepower rating: N/A	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas
- Maximum hourly wet gas throughput = 9 MMscf/day
- Maximum annual wet gas throughput = 3,285 MMscf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.02	0.09
Nitrogen Oxides (NO_X)	0.12	0.50
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	< 0.01	< 0.01
Particulate Matter (PM_{10})	< 0.01	< 0.01
Total Particulate Matter (TSP)	< 0.01	< 0.01
Sulfur Dioxide (SO_2)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	2.43	10.64
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	0.040	0.177
Ethylbenzene	0.024	0.105
n-Hexane	0.026	0.115
Toluene	0.098	0.431
Xylenes	0.149	0.651
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

VOC and HAP emission rates for the dehydration unit were obtained from GRI GLYCalc V4.0 with a 95% destruction efficiency
NOx, CO, and VOC emission factors for the flare were obtained from Table 13.5-1 of AP-42

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 – SO_2 emissions shall not exceed 2,000 ppm by volume (TV 5.1.6)
45 CSR 13 – H_2S emissions shall not exceed 50 gr/100cf (TV 5.1.7)
45 CSR 13 – 40 CFR 63 Subpart HH Benzene exemption requirements (TV 5.1.8, TV 5.1.14, R13-2963 6.1.7)
45 CSR 13 – Maximum Emission Limits (TV 5.1.9, R13-2963 6.1.1)
45 CSR 13 – The maximum wet natural gas shall not exceed 9 MMcf/day (TV 5.1.10, R13-2963 6.1.2)
40 CFR 63.760(f)(6) – Compliance with NESHAP HH is required upon initial start-up (TV 5.1.12, 5.1.13)
40 CFR 63.764(a) – Compliance with 40 CFR, Part 63, Subpart A, as listed in Table 2 of NESHAP HH (TV 5.1.14, R13-2963 6.1.8)
40 CFR 63.772(b)(2) – Procedures for determining benzene emissions for exemption under 40 CFR 63.764(e)(1) (TV 5.1.15, R13-2963 6.1.9)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 30-5.1.c - Compliance with TV 5.1.5 and 5.1.14 will be demonstrated by using GLYCalc V3 or higher and monitoring actual operating parameters (TV 5.2.1, R13-2963 6.2.1)
45 CSR 30-5.1(c) – SO_2 emissions shall be complied with by once-per-permit-term sampling of inlet natural gas stream (TV 5.2.3)
45 CSR 30-5.1(c) – H_2S emissions shall be complied with by once-per-permit-term sampling of inlet natural gas stream (TV 5.2.4)
45 CSR 13 – Wet Gas Throughput shall be monitored on a daily and monthly basis (TV 5.2.5, R13-2963 6.2.2)
45 CSR 13 – Wet Gas Sampling (TV 5.3.1, R13-2963 6.3.1)
45 CSR 13 – Facility-wide HAP emission calculations shall be maintained to demonstrate compliance with TV 5.1.5 (TV 5.4.2, R13-2963 4.4.4)
45 CSR 13 – Wet gas throughput records shall be maintained to demonstrate compliance with TV 5.1.10 (TV 5.4.4, R13-2963 6.4.2)
40 CFR 63.774(d)(1)(ii) – Maintain records of the actual benzene emissions (TV 5.4.9, R13-2963 6.4.7)
40 CFR 63.775(d) – NESHAP HH reports (TV 5.5.7, R13-2963 6.5.5)

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

ATTACHMENT E - Emission Unit Form

Emission Unit Description

Emission unit ID number:	**Emission unit name:**	**List any control devices associated with this emission unit:**
RBR02	RBR02 Dehydration Unit Reboiler	N/A

Provide a description of the emission unit (type, method of operation, design parameters, etc.):

A natural gas fired boiler used to reheat glycol within the dehydration unit.

Manufacturer:	**Model number:**	**Serial number:**
Cameron	300/550	A15112001583501
Construction date:	**Installation date:**	**Modification date(s):**
2012	2013	N/A

Design Capacity (examples: furnaces - tons/hr, tanks - gallons):
0.77 MMBtu/hr

Maximum Hourly Throughput:	**Maximum Annual Throughput:**	**Maximum Operating Schedule:**
635 cf/hr	5.6 MMcf/yr	8760 hrs/yr

Fuel Usage Data **(fill out all applicable fields)**

Does this emission unit combust fuel? _X__Yes ___ No	**If yes, is it?** __ Indirect Fired _X__Direct Fired
Maximum design heat input and/or maximum horsepower rating: 0.77 MMBtu/hr	**Type and Btu/hr rating of burners:**

List the primary fuel type(s) and if applicable, the secondary fuel type(s). For each fuel type listed, provide the maximum hourly and annual fuel usage for each.

Natural gas
- Maximum hourly fuel usage = 635 cf/hr
- Maximum annual fuel usage = 5.6 MMcf/yr

Describe each fuel expected to be used during the term of the permit.

Fuel Type	Max. Sulfur Content	Max. Ash Content	BTU Value
Natural gas	20 gr sulfur/100 cf	N/A	1,000 Btu/cf

Emissions Data		
Criteria Pollutants	Potential Emissions	
	PPH	TPY
Carbon Monoxide (CO)	0.02	0.09
Nitrogen Oxides (NO_X)	0.03	0.13
Lead (Pb)	N/A	N/A
Particulate Matter ($PM_{2.5}$)	< 0.01	0.01
Particulate Matter (PM_{10})	< 0.01	0.01
Total Particulate Matter (TSP)	0.01	0.03
Sulfur Dioxide (SO_2)	< 0.01	< 0.01
Volatile Organic Compounds (VOC)	0.03	0.15
Hazardous Air Pollutants	Potential Emissions	
	PPH	TPY
Benzene	< 0.01	< 0.01
Ethylbenzene	< 0.01	< 0.01
Formaldehyde	< 0.01	< 0.01
n-Hexane	< 0.01	0.01
Toluene	< 0.01	< 0.01
Regulated Pollutants other than Criteria and HAP	Potential Emissions	
	PPH	TPY

List the method(s) used to calculate the potential emissions (include dates of any stack tests conducted, versions of software used, source and dates of emission factors, etc.).

- NOx, CO, and VOC emission factors from Dominion Spec Sheet 2/20/2012
- PM, PM10, PM2.5, and SO2 emission factors from AP-42, Section 1.4, Natural Gas Combustion, Table 1.4-2, 7/98
- HAP emission factors from AP-42, Section 1.4, Natural Gas Combustion, Tables 1.4-3, 4, 7/98

Applicable Requirements

List all applicable requirements for this emission unit. For each applicable requirement, include the underlying rule/regulation citation and/or <u>construction permit</u> with the condition number. (*Note: Title V permit condition numbers alone are not the underlying applicable requirements*). If an emission limit is calculated based on the type of source and design capacity or if a standard is based on a design parameter, this information should also be included.

45 CSR 13 and 45 CSR 2-3.1 – Visible Emission Limits (TV 4.1.1, R13-2963 5.1.2)
45 CSR 13 – Emission Limits (TV 4.1.2, R13-2963 5.1.1)

__X__ Permit Shield

For all applicable requirements listed above, provide monitoring/testing/recordkeeping/reporting which shall be used to demonstrate compliance. If the method is based on a permit or rule, include the condition number or citation. (Note: Each requirement listed above must have an associated method of demonstrating compliance. If there is not already a required method in place, then a method must be proposed.)

45 CSR 13 – Compliance with 4.1.1 is demonstrated by combusting natural gas, conducting Method 9 upon request of Secretary, and maintaining records of actual operating hours (TV 4.2.1, TV 4.4.1, TV 4.5.1, R13-2963 5.2.1, R13-2963 5.4.1, R13-2963 5.5.1).

Are you in compliance with all applicable requirements for this emission unit? _X__Yes ___No

If no, complete the **Schedule of Compliance Form** as **ATTACHMENT F**.

Attachment G

Air Pollution Control Device Form

ATTACHMENT G - Air Pollution Control Device Form

Control device ID number: F1	**List all emission units associated with this control device.** DEHY02, RBR02	
Manufacturer: QTI	**Model number:** Q100	**Installation date:** 2013

Type of Air Pollution Control Device:

___ Baghouse/Fabric Filter ___ Venturi Scrubber ___ Multiclone

___ Carbon Bed Adsorber ___ Packed Tower Scrubber ___ Single Cyclone

___ Carbon Drum(s) ___ Other Wet Scrubber ___ Cyclone Bank

___ Catalytic Incinerator ___ Condenser ___ Settling Chamber

___ Thermal Incinerator _X_ Flare ___ Other (describe) _____

___ Wet Plate Electrostatic Precipitator ___ Dry Plate Electrostatic Precipitator

List the pollutants for which this device is intended to control and the capture and control efficiencies.

Pollutant	Capture Efficiency	Control Efficiency
VOC		95%
Benzene		95%
Ethylbenzene		95%
n-Hexane		95%
Toluene		95%
Xylene		95%

Explain the characteristic design parameters of this control device (flow rates, pressure drops, number of bags, size, temperatures, etc.).

QTI dehydration unit controlled flare
4.0 MMBtu/hr non-assisted burner

Is this device subject to the CAM requirements of 40 C.F.R. 64? __ Yes _X_ No

If Yes, **Complete ATTACHMENT H**

If No**, Provide justification.** The dehy unit (DEHY02) is not subject to CAM since it is subject to NESHAP Subpart HH, which has provisions for compliance monitoring established after 1990. Per 64.2(b)(1)(i), "*emission limitations or standards proposed by the Administrator after November 15, 1990 pursuant to section 111 or 112 of the Act*" are exempt from CAM. CAM was established to build in provisions for how compliance would be demonstrated for emission limits if not adequately covered by a NSPS or NESHAP rule.

In addition, for VOC purposes, the dehy unit is not subject to CAM per 64.2(b)(1)(vi), which states "*emission limitations or standards for which a part 70 or 71 permit specified a continuous compliance determination method, as defined in 64.1*" is exempt from CAM. Since the R13 permit for the facility (R13-2963) specifies a "continuous compliance determination method" condition (e.g. continuously monitoring the flare using a thermocouple to detect the presence of a flame) and that R13 condition was rolled into the Title V permit, CAM does not apply.

Describe the parameters monitored and/or methods used to indicate performance of this control device.

45 CSR 6-4.1 – Particulate Matter emission limit (TV 5.1.1)
45 CSR 6-4.3 – Incinerator operating requirements (TV 5.1.2, R13-2963 6.1.4)
45 CSR 6-4.5 – Incinerator operating requirements (TV 5.1.3)
45 CSR 6-4.6 – Incinerator odor prevention requirements (TV 5.1.4, R13-2963 6.1.4)
40 CFR 63.10(b)(3) – Facility shall maintain minor source of HAPs (TV 5.1.5, R13-2963 4.1.2)
45 CSR 10-4.1 – Sulfur Dioxide emission limit (TV 5.1.6)
45 CSR 10-5.1 – Hydrogen Sulfide emission limit (TV 5.1.7)
45 CSR 13 – Emission limits (TV 5.1.9, R13-2963 6.1.1)
45 CSR 13 – Operation and design of air pollution control equipment (TV 5.1.11, R13-2963 6.1.3)

Monitoring
45 CSR 30-5.1c – Compliance with 5.1.5 and 5.1.14 shall be demonstrated by using GLYCalc using actual operating parameters (TV 5.2.1, R13-2963 6.2.1)
45 CSR 30-5.1c – Compliance with 5.1.2 and 5.1.11 shall be demonstrated by conducting monthly visible emission observations (TV 5.2.2, R13-2963 6.2.3)
45 CSR 30-5.1.c – Compliance with 5.1.6 shall be demonstrated by once-per-permit-term inlet wet gas sampling (TV 5.2.3)
45 CSR 30-5.1.c – Compliance with 5.1.7 shall be demonstrated by once-per-permit-term inlet wet gas sampling (TV 5.2.4)
45 CSR 13 – Pilot flame monitoring requirements (TV 5.2.6, R13-2963 6.2.4)
45 CSR 13 – Operate and maintain the flare in conformance with its design (TV 5.2.7, R13-2963 6.2.5)

Testing
45 CSR 13 – Initial Method 22 (TV 5.3.3, R13-2963 6.3.3)
45 CSR 13 – Flare compliance assessment shall be conducted if required (TV 5.3.4, R13-2963 6.3.4)

Recordkeeping
45 CSR 13 – Records of annual HAP emissions (TV 5.4.1, R13-2963 4.4.4)
45 CSR 13 – Records of actual operating hours (TV 5.4.2, R13-2963 6.4.1)
45 CSR 13 – Records of visible emission and opacity observations (TV 5.4.4, R13-2963 6.4.3)
45 CSR 13 – Records of the flare design evaluation (TV 5.4.6, R13-2963 6.4.5)

Reporting
45 CSR 13 – Reporting of deviations of visible emissions requirements (TV 5.5.1, R13-2963 6.5.1)
45 CSR 13 – Report deviation from flare design and operation criteria (TV 5.5.3, R13-2963 6.5.3)